### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-013083 Address: 333 Burma Road **Date Inspected:** 22-Mar-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Mr. Wuzhi Cheng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

## **Summary of Items Observed:**

This CALTRANS OSM Quality Assurance Inspector (QA) Surendra Prabhu was present during the times noted above for observations relative to the fabrication of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

### **OBG TRIAL ASSEMBLY**

This QA Inspector Randomly observed the following work in progress:

**SEGMENT: 7BW-7CW** 

Shielded Metal Arc Welding (SMAW) welding of weld joint EP068-001-008. Welder is identified as 067764. ZPMC Quality Control (QC) is identified as Mr. Sun Bai Zhang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2114 -FCM-1.

Shielded Metal Arc Welding (SMAW) welding of weld joint DP648-001-021. Welder is identified as 066422. ZPMC Quality Control (QC) is identified as Mr. Sun Bai Zhang. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-T-3213 –B-U3b.

Shielded Metal Arc Welding (SMAW) welding of weld joint OBW7B-007. Welder is identified as 067571. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply

# WELDING INSPECTION REPORT

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with the Applicable WPS: WPS-B-P-2214-B-U2-FCM-1.

Shielded Metal Arc Welding (SMAW) welding of weld joint OBW7B-009. Welder is identified as 067571. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2214-B-U2-FCM-1.

**SEGMENT: 7BW** 

Shielded Metal Arc Welding (SMAW) welding of weld joint CA035-006. Welder is identified as 066361. ZPMC Quality Control (QC) is identified as Mr. Feng Ya Jun. The welding variables recorded by QC appeared to comply with the Applicable WPS: WPS-B-P-2214-TC-U4b-FCM-1.

**SEGMENT: 7AE-7BE** 

This QA Inspector observed ZPMC welding personnel performing Buttering by Shielded Metal Arc Welding (SMAW) process for the X37A. Welder is identified as 050969. In process SMAW appears to be progressing in compliance with Caltrans Engineer Approved welding procedure i.e. WPS-345-SMAW-1G (1F)-Repair. The Buttering welding was been performed against the B-WR11081Rev.No:0 and This QA noted that buttering has been done to correct the gap between the X37A and bolts in the "I" Rib, X37A and Deck panel which was exceeded the requirements. ZPMC Quality Control (QC) is identified as Mr.Sun Bai Zhang and Certified Welding Inspector (CWI) is identified as Mr. Wuzhi Cheng.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

## **Summary of Conversations:**

Only general conversation was held between QA and Quality Control (QC) concerning this project.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Prabhu,Surendra	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer